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EXAMINER

YE, LIN

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

### Application No.

09/987,849

### Applicant(s)

VIINIKANOJA ET AL.

### Examiner

Lin Ye

### Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 106-110, 112-117, 119-127 and 129-143 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 106-110, 112-117, 119-127 and 129-143 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/30/06 has been entered.
2. Applicant's arguments with respect to claims 106-110, 112-117, 119-127 and 129-143 filed on 10/30/2006 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 143, 121, 123, 139 and 141 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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For claim 143, nowhere in the applicant's application support the limitations “ **a part of a unitary housing** of the mobile terminal device comprising the camera system and at least one telecommunication component, wherein **the part of housing is detachable** from the mobile terminal device and comprises at least part of a lens module adopted to cooperate with said camera system” as recited in claim 43. For example, the applicant discloses two embodiments. The first embodiment disclosed in Figure 2a, the camera system (41) attached in outside of body of the mobile phone (1). This clearly the house (41) is separated from the house (1). The camera system (41) and mobile phone (1) do not form a unitary housing. The second embodiment disclosed in Figures 2b-7, the camera system (42) is built in the body of the mobile phone (2) for forming a unitary housing. However, nowhere in this embodiment shows the camera system is detachable from the body of the mobile phone (2).

Referring to claims 121 and 139, please see examiner's comments with respected to claim 143.

Referring to claims 123 and 141, please see examiner's comments with respected to claim 143.

Appropriate correction is required.

For examination purpose, this claim will be interpreted as it is best understood.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 106, 108-110, 112, 113, 116-117, 119, 125-127, 129, 130, 131 and 133-137 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida et al. U.S. Patent 6,690,417.

Referring to claim 106, the Yoshida reference discloses in Figures 1 and 3, a mobile terminal device (100) comprising: a unitary housing of the mobile terminal device comprising at least one telecommunications component and a camera system (See Col. 5, lines 23-30) comprising a lens module (108) which enables taking pictures with optical imaging properties given by the lens module, and a means for changing optical properties of the lens module (e.g., the lens 108 is a zoom lens of the three-time magnification, see Col. 7, lines 26-34), the means being adapted to cooperate with the lens module of the camera system to enable taking pictures with changed optical imaging properties, wherein a part of the unitary housing comprises the means for changing optical properties (See Col. 7, lines 35-45).

Referring to claim 108, the Yoshida reference discloses wherein the part of the unitary housing (100) integrates an assembly of a plurality of means for changing optical properties (e.g., changing focal length for zooming and changing F number for setting optical apertures) each being adapted to cooperate with said lens module (108) of said camera system, wherein said assembly can be changed upon actuation (See Col. 7, lines 20-54).

Referring to claim 109, the Yoshida reference discloses wherein said means for changing optical properties comprises a lens (108).

Referring to claim 110, the Yoshida reference discloses wherein the camera system is built into said mobile terminal device as shown Figure 1.

Referring to claim 112, the Yoshida reference discloses wherein said mobile terminal device is a mobile phone as shown in Figures 1.

Referring to claim 113, the Yoshida reference discloses in Figures 1 and 3, a part of a unitary housing of a mobile terminal device (100) comprising at least one telecommunications component and a camera system, wherein the part of the housing comprises means for changing optical properties of a lens module (e.g., the lens 108 is a zoom lens of the three-time magnification, see Col. 7, lines 26-34) of a camera system of said mobile terminal device, wherein the camera module with the lens module (108) enables taking pictures with optical properties given by the lens module and the means are adapted to cooperate with the lens module of the camera system to enable taking pictures with changed optical imaging properties (See Col. 7, lines 35-45).

Referring to claim 116, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 108 and 113.

Referring to claim 117, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 109 and 113.

Referring to claim 119, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 112 and 113.

Referring to claim 125, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 106 and 113.

Referring to claim 126, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 109 and 125.

Referring to claim 127, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 110 and 120.

Referring to claim 129, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 112 and 120.

Referring to claim 130, the Yoshida reference discloses all subject matter as discussed with respected same comments to claim 106 and 113.

Referring to claim 131, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 106 and 130.

Referring to claim 133, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 108 and 130.

Referring to claim 134, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 109 and 130.

Referring to claim 135, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 110 and 130.

Referring to claim 136, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 111 and 130.

Referring to claim 137, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 112 and 130.

7. Claims 120-124 and 143 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang U.S. Patent Publication 2002/0155864.

Referring to claim 120, the Wang reference discloses in Figures 1-6, an apparatus for changing optical properties of a lens module of a camera system of a mobile terminal device, the module enables taking pictures with optical imaging properties given by the lens module, the apparatus being comprised by a part of a unitary housing of the mobile terminal device comprising at least one telecommunications component and the camera system, and the apparatus being adapted to cooperate with the lens module of the camera system to enable taking pictures with changed optical imaging properties (e.g., the mobile terminal device comprising at least one telecommunications component 10 and any other types of electrical components, such as display, digital camera, etc., to form a unitary housing as showing Figures 1-6, see page 2, [0023]. It should be noted that the digital camera has means for changing optical properties of a lens module, such as zooming and focusing operation as well known in the art).

Referring to claim 121, the Wang reference discloses wherein the part of unitary housing is detachably connected with the camera system as shown in Figure 6.

Referring to claim 122, the Wang reference discloses wherein the apparatus for changing optical properties comprises a lens as shown in Figure 6.

Referring to claim 123, the Wang reference discloses wherein the unitary housing is a housing of an external camera system attached to the mobile terminal device as an external module as shown in Figure 6.



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Referring to claim 124, the Wang reference discloses wherein the mobile terminal device is a mobile phone as shown in Figures 1-6.

Referring to claim 143, the Wang reference discloses in Figures 1-6, a mobile terminal device comprising a camera system (40) as shown in Figure 6; a part of a unitary housing of the mobile terminal device comprising the camera system and at least one telecommunications component (10), wherein the part of the housing is detachable from the mobile terminal device and comprises at least part of a lens module adopted to cooperate with said camera system (e.g., the mobile terminal device comprising at least one telecommunications component and any other types of electrical components, such as display, digital camera, etc., to form a unitary housing as showing Figures 1-6, see page 2, [0023]).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 107, 114, 115 and 132 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. U.S. Patent 6,690,417 in view of Suda et al. U.S. Patent 6,373,524.

Referring to claim 107, the Yoshida reference discloses all subject matter as discussed with respect to claim 106, except that the Yoshida reference does not explicitly show the means changing optical properties is detachably connected with said camera system.

The Suda reference teaches in Figure 1, an interchangeable lens assembly (127) camera system including zoom and focus lenses (102 and 105), motors (121 and 125) for driving the zoom and focus lenses and controlled by motor control circuit (118) as providing the means for changing optical properties; and the interchangeable lens assembly is detachably connected with the camera system (camera main body 128, see Col. 5, lines 49-60). The Suda reference is evidence that one of ordinary skill in the art at the time to see more advantages the digital camera system having an interchangeable lens assembly (including means changing optical properties) detachably attached to the camera main body so that the camera system can easily work with different types interchangeable lenses (See Col.3, lines 9-21). For that reason, it would have been obvious to one of ordinary skill in the art to modify the camera system of Yoshida ('417) by providing means changing optical properties is detachably connected with the camera system as taught by Suda ('524).

Referring to claim 114, the Yoshida and Suda references disclose all subject matter as discussed with respect to same comments to claims 107 and 113.

Referring to claim 115, the Yoshida and Suda references disclose all subject matter as discussed with respect to same comments to claims 107 and 113, and Suda reference discloses wherein said part of said housing (camera) is detachably connected to a lens module.

Referring to claim 132, the Yoshida and Suda references disclose all subject matter as discussed with respected same comments to claims 107 and 130.

10. Claims 138-142 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. U.S. Patent 6,690,417 in view of Wang U.S. Patent Publication 2002/0155864.

Referring to claim 138, the Yoshida reference discloses all subject matter as discussed with respected to claim 130, except that the Yoshida reference does not explicitly show wherein the part of the unitary housing is detachably connected with the camera system.

The Wang reference teaches in Figures 1-6, a part of a unitary apparatus comprising a camera component (40) and mobile terminal component (10); the camera system can be either attachable/detachable with body of mobile terminal system (See page 2, [0023]). The Wang reference is evidence that one of ordinary skill in the art at the time to see more advantages the system having more flexible design options to attach/detach the camera system with body of mobile terminal system so that the expandability of the communication component may be greatly enhanced with full functions of other electrical device, such as digital camera, large display, MP3 player, etc.. For that reason, it would have been obvious to one of ordinary skill in the art to modify the camera system of Yoshida ('417) by providing the part of the unitary housing is detachably connected with the camera system as taught by Wang ('524).

Referring to claim 139, the Yoshida and Wang references disclose all subject matter as discussed with respected same comments to claims 121 and 130.

Referring to claim 140, the Yoshida and Wang references disclose all subject matter as discussed with respected same comments to claims 122 and 130.

Referring to claim 141, the Yoshida and Wang references disclose all subject matter as discussed with respected same comments to claims 123 and 130.

Referring to claim 142, the Yoshida and Wang references disclose all subject matter as discussed with respected same comments to claims 124 and 130.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (571) 272-7372. The examiner can normally be reached on Mon-Fri 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Lin Ye', with a stylized, flowing script.

Lin Ye  
Primary Examiner  
Art Unit 2622

November 23, 2006